THE DELAWARE AND HUDSON COMPANY BULLETIN

“the D&H”

MAY 1, 1928

IN AU SABLE RIVER COUNTRY

Mother

IT'S a wonderful thing, a Mother; other folks can love you, but only your mother understands. She works for you, looks after you, loves you, forgives you anything you may do, understands you, and then the only bad thing she ever does to you is to die and leave you.

BARONESS VON HUTTEN

* * *

MOTHER'S DAY, SUNDAY,
MAY 13, 1928

"the D&H" *The* "the D&H"
DELAWARE AND HUDSON COMPANY
BULLETIN

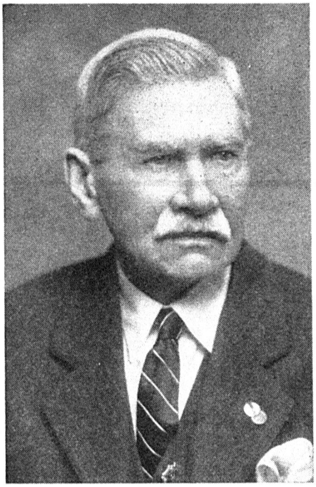
Vol. 8 Albany, N. Y., May 1, 1928 No. 9

He's Always Been With Us

Eighty-Three-Year Old Engineman Has Outlived All With Whom He Began Work, Members of His Family and Regiment of Civil War Days

WITH the passing from this life of the late Chauncey M. Depew, recently, came the startling realization that the present generation has never known what it may be like to live without him. He had already won public prominence when, except for perhaps a scattering few, the oldest among us were yet children. People by the thousands knew him and admired him, although they had never seen him. Thus the goodly influence of his wonderful life can never be fully gauged.

Neither does the present generation of railroad men on The Delaware and Hudson, particularly on the Susquehanna and Pennsylvania divisions where he was employed for so many years, know what it is like to live without the genial and kindly countenance of CHARLES E. MORRISON, of No. 6 Division Street, Oneonta, N. Y., a retired locomotive engineman, in their midst. It may be that they do not see him as often as in former years, yet he mingles with them with a frequency that continues him as one of their circle, nevertheless.



CHARLES E. MORRISON

It was at his own request, prompted by the unsatisfactory condition of his health, that his active career was brought to a close on October 1, 1915. At that time he had a record of thirty-five years of continuous service with the Company. These figures, however, do not represent the full extent of his railroad experience, which, with the exception of the period from 1862 to 1865, when he served with the Union forces in the Civil War, was continuous from 1858 to 1915, or approximately fifty-four years. Taking into consideration the exception just noted and another that will later be mentioned, it may also be said, and with a degree of propriety, that he has been on The Delaware and Hudson payroll for a total of no less than fifty-six years, for he is still drawing a monthly allotment in recognition of his long and faithful service.

CHARLIE, as he is popularly known among his acquaintances, is a most fortunate man. Possessed of an enviable personality, he has won his friends among young people and their elders, alike. In this particular respect he is wealthy, for his friends are legion. Moreover, he enjoys the unique distinction of being an octogenarian. No, you probably wouldn't believe that, because he very successfully belies his age. Be that as it may, he will, however, on July 16, next, celebrate his eightythird birthday. It is true that the broad square shoulders of his once stalwart form droop perceptibly and that his gait is somewhat slower than in former years, but balancing these few indications of advanced age is his active interest in the current affairs of his home city, his church and the railroad.

Rarely does he miss a meeting of The Delaware and Hudson Veterans' Association on which occasions he finds great delight in greeting the men with whom he formerly worked. The real proof of his age lies in the fact that he has outlived five brothers and five sisters, among whom he was the second oldest, likewise the men with whom he began his railroad work and the members of his regiment of Civil War days, insofar, at least, as he has personal knowledge. It is these things, rather than appearances, that make him an old man to those, and only those, who are bold enough to delve into his past.

His father, Martin Morrison, came to this country from Ireland when he was fifteen years old. He settled in Carbondale where, for many years prior to his death, he ran "the old Blakely engine," about midway on the No. 1 plane of our gravity road, which was used for hoisting out of Carbondale yard light cars en route to Archbald.

Carbondale therefore became CHARLIE'S birthplace. The family home was in Dartt Avenue when, on July 16, 1845, he was born. Until he was thirteen years old, he attended a public school that stood in Dundaff Street on a site now occupied by the Hendricks Manufacturing Company's plant. Through his father's associations with the gravity road, he became acquainted with C. P. Wurts, then superintendent, and it was from him that he obtained his first position which was that of carrying water for the men who were replacing the strap rail between Carbondale and Archbald with what he calls "T" iron. That was in 1858. A year later he was transferred to the Mine department and became a driver between No. 2 shaft and the Lackawanna breaker which then stood near the site of the present Coalbrook breaker. Another change brought him back to the railroad, also as a driver. He continued at this work, between what was known as Davis' and the Lackawanna breaker, a distance of about a half-mile, until 1861.

Then came the Civil War and he could not resist its lure. He gave up his job to enlist, but was rejected because he was too young. Another year of railroad work followed. But he could not ignore the call to the colors and with two pals, George Forrester and Patrick Brown, he enlisted in the 52nd Pennsylvania Infantry on March 17, 1862.

Leaving Carbondale, he was first sent to Alexandria, Va., and thence to Petersburg. Later he was stationed at Fort Royal, S. C., for about three months, following which he did boat picketing in the vicinity of Morris Island, S. C., for nearly a year. Then as a member of the 1st Brigade, 2nd Division, 23rd Corps, under General Schofield, he was with General Sherman on his famous march to the sea. He was mustered out at Salsbury, N. C., July 17, 1865.

Returning home, he was first employed at the Dickson Locomotive Works in Scranton. Then he re-entered the employ of The Delaware and Hudson Company and was given a job tending the foot of the plane at the Coalbrook breaker, at Carbondale. There he remained until March, 1866, when he left the service and became a locomotive fireman with the Delaware, Lackawanna and Western, between Scranton and Great Bend. On March 6, 1869, he was promoted to an engineman and continued at that work until 1877 when he was again employed by The Delaware and Hudson, this time as an engineman in the yard at Carbondale.

On September 6, 1880, he was transferred to the Susquehanna division and moved to Oneonta, which city has since been his home. At that time he was given a freight run between Albany and Oneonta. Ten years later, or on April 12, 1890, while running south from Green Island with No. 41, and the late Will Miller as his conductor, he suffered a serious injury in alighting from his engine at the register board at the freight house near the foot of Green Street, in Albany. He continued to Oneonta with his train, but on returning home his lower limbs became paralyzed and for six months he was unable to work. Had it not been for this injury he confidently believes that he might have continued at his work much longer than what he did.

From August, 1900, until April, 1901, while on a leave of absence, he was employed as a messenger by the American Locomotive Company. This work took him to all parts of the country, but, being a home-loving man, he did not find it to his liking and after a trip to Ogden, Utah, he resumed his work with The Delaware and Hudson, in the Mechanical department instead of on the road. For two years he was employed as night engineman on the No. 17, later known as the "Seven Spot," which was used for switching work around the shops. Then he was trans-

(*Turn to Page* 142)

What Is "Job Safety"

To the Man-on-the-Job Who Would Protect His Employe Holdings, His Accumulated Years of Service, It is Something Worthy of Consideration

WHAT is "job safety?" We hear a great deal these days about Safety First as it pertains to the preservation of life and limb, but not so much about its ability to protect one's job. Its merits, however, are about equally balanced between the two, and it is just as important that we talk about the one as about the other. But were man not so habitually neglectful of himself and his personal interests there would be no need for Safety First campaigns of any description whatsoever. Safety, briefly defined, is sensibleness — "good mental perception."

Do You Know —

THAT *during 1927, the railroads distributed $3,000,000,000 in wages and spent hundreds of millions in other ways?*

THAT *the total investment in the railroads in 1926 (the last figures available) amounted to $24,290,196,788, or an average of $13,652 per employe?*

THAT *the railroads last year received an average of only 1.080 cents for moving a ton of freight one mile, and that this represented a decrease of 15.3 per cent as compared with 1921?*

THAT *total freight car loadings for the week of March 17 (the last figures available) showed a decrease of 59,846 cars below the corresponding week in 1927?*

THAT *the payment of the railroads' 1927 tax bill of 380½ million dollars was the equivalent of turning over 57,000 miles of track to the tax collector insofar as net earnings were concerned? In 1911, 25,000 miles would have sufficed.*

THAT *wage advances last year amounted to fifty million dollars?*

THAT *had the freight rates in force in 1921 been still in force in 1927, the aggregate earnings of the roads of the country would have been $950,000,000 greater than what they were?*

THAT *Class One railroads in 1927 had a net operating income of 4.40 per cent on their property investment? In 1926 it was 5.13 per cent.*

THAT *twenty-seven Class One railroads operated at a loss in February? Twelve of these were in the Eastern district, three in the Southern and twelve in the Western.*

Experience, however, has taught students of human nature that the average man simply will not look out for himself as he should. He is a most dependent creature in this particular respect; someone must constantly be pointing out to him the right from the wrong, insofar as his working habits are concerned, and likewise anticipate for him, dangerous pitfalls. Deprive him of this attention, for even a brief period, and he will probably suffer injury.

Just as some men become injured through their own carelessness, others lose their jobs in much the same way. This being true, why, then, is it not permissible to talk of "job safety?" It is a very important subject after all. The loss of a job cripples some men nearly as much as would a serious injury. Their families suffer nearly as much, also. It is not the easiest thing, you know, to find another job these days, and this is particularly true when a man is job-hunting as the result of his own carelessness.

But what, after all, is a job? Is it not the several tasks we have contracted to perform for our employer in return for a certain sum of money called wages, massed? A job is work. Without work there can be no job. The terms are synonymous. Moreover, a job is a means to an end. It possesses dual possibilities. Well done, it insures continued employment and an opportunity for advancement with increased advantages and compensation. Carelessness, however, will destroy it.

We should indeed give serious thought to "job safety." Call it "job insurance," if you would rather. "Job insurance," as here inferred, is not the stock in trade of high powered salesmen. Neither are its terms and promises to be found set forth in multi-colored, highly embossed brochures, with imposing red seals affixed. It is, instead, a heart response. No man or woman who works for a living can afford to ignore it. It is indispensable.

Job insurance is founded on enthusiasm or the ability to subordinate self in favor of the work to be done, to the extent, at least, that no detail, however trivial, is overlooked or neglected. It is the ability to see a job as a budding flower which becomes more and more beautiful from day to day as it spreads its petals and reveals its hidden virtues, called beauty in the case of flowers. Some may find it difficult to believe this is true. They may fail to see anything of beauty in their job, which but proves that as yet their heart is not in their work, that they are not sufficiently familiar with it to be able to comprehend its virtues, its possibilities. Every job possesses possibilities, the least of which make it the stepping stone to the next job higher up. It exacts, of course, such essential requisites as ambition, punctuality, initiative, honesty, determination and a wealth of "sticktoitiveness," all of which are also born of enthusiasm.

Pride is another important fundamental of job insurance. "It is well," wrote Charles Dickens, "for a man to respect his own vocation (his job or his work) whatever it is, and to think himself bound to uphold it, and to claim for it the respect it deserves." Lack of pride indicates unfitness. There must be pride before there can be any success.

Albeit that there are many good formulas for job insurance, there is a ring of earnestness about a brief discourse on "Work," by Archer Brown, that possesses a strong appeal. He has written:

"When your work is work, *work*. Put your whole mind and heart in it. Know nothing else. Do everything the best. Distance everybody about you. This will not be hard for the other fellows are not trying much. Master details and difficulties. Know more than the boss. * * * All this is easy when the habit of conquering takes possession. Be yourself the leader, not the trailer. Set the standard as conscience dictates. Then you will mold instead of being molded."

Choose your own term—"job safety" or "job insurance"—but take good care of your job. Protect it as you would your body. It requires many years of service to get the best out of any job. Each year of service increases your assets as an employe. Don't carelessly squander your holdings.

The fact that you are a railroad man or woman matters not. Your work is important. It is about the most important work there is when it is considered that in the short space of less than a week our great centers of population would become famine stricken if denied the service you and your fellow workers are performing.

Today, as never before, however, Management is confronted by almost insurmountable obstacles. These include problems of restrictive legislation, rate reductions, increasing taxes, wage demands, motor bus and truck competition, et cetera. They are referred to as "problems of management," but it is a fact that the effect of the manner in which they are solved gravitates to the employe family. The employe is "the man on the job." It is he who handles the trains and who mans the shops and offices. It is he who can effect economies and increase production. The success of his job depends upon the success of the railroad whereupon he is employed. If he considers job insurance of value, he will do his utmost to assist Management in bearing its rapidly increasing burdens. Failure to do this will be to put his job up for bid or chance the risk of having it abolished altogether.

The Public Pays

HOW we pay taxes without knowing it is illustrated by figures collected by the Ohio Committee on Public Utility Information.

Last year public utility companies providing Ohioans with electric light and power, gas, telephone, and electric railway services, paid $24,057,471.52 in taxes. This was an increase of $6,000,000, or approximately 31 per cent over 1921. All of this was paid, of course, by the public which used these services.

The committee finds that the average user of light and power, gas and telephone service, paid $18 last year in taxes, through the medium of the monthly bill for service. In addition, out of each dime he paid for street car rides, one cent went for taxes.

In detail, the several kinds of utilities paid taxes in 1926 as follows:

Seventeen cents out of every dollar paid by consumers for gas went to pay taxes.

Eleven cents out of every dollar paid for electric light and power went for taxes.

Eleven cents out of every dollar paid for telephone service went for taxes.

Eleven cents out of every dollar paid for electric railway fares went for taxes.

This means that if a consumer pays $3 a month for gas, he pays $6.12 in taxes during the year. If his electric light bill averagd $3 a month he paid $3.96 in taxes during the year. If his telephone bill averaged $3 a month, he paid another $3.96. If he took a street car twice a day, he paid between $6 and $7 more in taxes—From the *Youngstown (Ohio) Vindicator*.

Vagabondage In England

Rogues and Vagabonds of the Sixteenth Century Confronted England's Thinkers With a Problem of Its Kind Never Presented In Any Age Before or Since

IN the sixteenth century rogues and vagabonds were larger in proportion to the population of England than they ever were before or ever have been since, and the history of the times shows why this should be true. Elizabethan rogues and beggars were a by-product of the change from the mediaeval to the modern system of holding land and paying agricultural labor, which took place in the fourteenth and fifteenth centuries.

Gabriel de Mussis, an Italian lawyer, accompanied the march of the bubonic plague, then known as the "Black Death," from the Crimea (whither it was said to have been introduced from Tartary) to Genoa, where, with a handful of survivors of a Genoese expedition, he landed probably at the close of the year 1347. He narrates how the few that had themselves escaped the pest transmitted the contagion to all they met. Nearly the whole of Europe was gradually overrun by the pestilence. It reached Oxford in 1352 when two-thirds of her University population was lost. The second plague followed in 1361 and the third in 1368. The mortality of the "Black Death" was enormous. It is estimated that, in various parts of Europe, two-thirds or three-fourths of the population died in the first pestilence, and that in England the mortality was even higher.

In the fifteenth and sixteenth centuries the "Black Death" recurred frequently in nearly all parts of Europe. The epidemic of 1563 in London was very severe, a thousand dying weekly. There was a great plague in England in 1592 and again in 1599. In 1603 more than 38,000 died in London; in 1625 more than 35,000. The fifth epidemic, in 1647, was not so severe, but in 1664-1665 occurred what has since always been spoken of as the "Great Plague," when out of a population of 460,000 the bills of mortality recorded the death of 68,596, which number is considered rather too low.

Those afflicted were confined to their houses, which were marked with a red cross and the legend "God have mercy upon us," but almost invariably death came within five days. It affected all classes of society. Joan, the daughter of King Edward, and two Archbishops of Canterbury were among the victims, while the long continuance of the visitations, which as a rule took from six to nine months to work out their virulence in any particular spot, seems to have cowed and demoralized society.

England was still an agricultural community, worked on the manorial system, and the sudden disappearance of a third of the farm hands threw everything into disorder. Hence there arose, almost at once, a bitter and long-continued strife. An open market for labor meant prosperity for every man who was free to sell his labor wherever he liked, and all over England the peasant made a determined and usually successful effort to get the market value of his labor. On the other hand, the employers sought for relief. It was found that there was an excellent market for wool in Flanders, and, during the latter half of the fifteenth century the industry of cloth weaving grew up in the towns of England, so that by the year 1500 sheep raising had come to be far more profitable than tillage. Now the landholders began to assert their right to the market price of the land. The ancient landholder lived without the aids and appliances of modern luxury. His grandeur consisted, not in the length of his rent-roll, the brilliance of his equipages, or the beauty of his palaces or parks, but in the strength of his fortresses, and the numbers of armed and disciplined retainers and feudal tenants who followed his standard. His splendor consisted in his power. All this the "Black Death" destroyed; it did more; from the middle of the sixteenth century land began to fall into the position of other marketable property. Whatever else may be said, the ancient system of land-holding and land-working had been changed never to be resumed.

Other causes, minor ones, added to the confusion. The great bands of feudal retainers, which the landowners had maintained, were broken up and dispersed. The dissolution of the monasteries by Henry VIII had an important effect. In their prime they gave a great deal in charity, but without much discrimination between worthy and unworthy. Whoever came to the door received an alms. No adequate provision

(*Turn to Page* 140)

The
Delaware and Hudson Company
BULLETIN

Office of Publication :
DELAWARE AND HUDSON BUILDING,
ALBANY, N. Y.

PUBLISHED semi-monthly by The Delaware and Hudson Company, for the information of the men who operate the railroad, in the belief that mutual understanding of the problems we all have to meet will help us to solve them for our mutual welfare.

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Vol. 8 May 1, 1928 **No. 9**

Faith builds a bridge across the gulf of
death,
To break the shock which nature cannot
shun,
And lands thoughts smoothly on the other
shore.
—YOUNG.

Walking for Health

THE best medicine! Two miles of oxygen three times a day. This is not only the best, but cheap and pleasant to take. It suits all ages and constitutions. It is patented by infinite wisdom, sealed with a signet divine. It cures cold feet, hot heads, pale faces, feeble lungs, and bad tempers. If two or three take it together it has a still more striking effect. It has often been known to reconcile enemies, settle matrimonial quarrels, and bring reluctant parties to a state of double blessedness. This medicine never fails." Thus prescribed an old bootmaker mentioned by Hinsdale in his essay, "Atmospheric Air in Relation to Tuberculosis."

"Walking for Health," which is but the modern interpretation of the old bootmaker's logic, was discussed through Radio Station WGY, not long ago, by Dr. F. G. Metzger, health officer for the village of Carthage, N. Y. "More ills," said Dr. Metzger, "are caused by disordered activity in organs as a result of errors in diet, rest or exercise, than are caused by actual disease processes. The various physiological processes of the body depend for their proper performance upon activity. The blood will not be adequately aerated in the lungs unless the chest is well expanded; indigestion will result if there is sluggishness in the stomach and intestines due to faulty action of the muscular system of these internal organs; the heart structure will fail in its efficiency if excess fat accumulates in and around its muscular walls or increases its work by disproportionate deposit through the body generally; and the nervous system is prone to develop certain functional disorders such as irritability, insomnia, et cetera, resulting from prolonged irritation by the poisons of faulty changes in the body chemistry. Walking exercises practically every muscle in the body, keeps you physically fit, and gives added zest and enjoyment to the day's work.

"Golf is indulged in by many who derive great benefit from the walking incidental thereto. Other popular out-of-door sports, such as tennis, baseball and football are excellent for those physically fit to indulge, though it requires no great stretch of the imagination to see that they are for the most part different from the exercise of brisk walking only in intensity. Those who have witnessed the slow motion pictures of a walking match were probably quite surprised to note that the entire body entered into the effort. However, the stride and rhythm is more important than anything else, because unless there is free swinging of the arms, accompanied by a slight turning of the body with each step, the very valuable exercise of the body from the hips up is lost."

Try "Walking for Health." You'll enjoy it, surely!

Mother

THE theme is worn and aged, lads,
But so is mother's brow,
And though you know what I shall say
I'll say it anyhow.

The theme is worn and aged, lads,
But so are mother's hands.
No matter what her boy may do
She always understands.

I often wish that I might be
A little boy again
And run to her in grief and joy
In gladness and in pain.

I often wish that I might see
Her by the cottage door,
Or sitting in the window seat
That roses clambered o'er.

I often wish that I might smell
The hollyhocks she set
Along the garden paths beside
The fragrant mignonette.

The theme is gray and hoary, lads.
But so is mother's hair,
And could I find the way back home
I'd find her waiting there.

—NEW YORK SUN.

Stephenson and His Son

Their Notable Contributions to the Development of the Locomotive and the Railroad, As Cited by Intimate Acquaintance, Form a Most Interesting Chapter

(Continued from Last Issue)

STEPHENSON'S first attempt to revolutionize railways commenced with the improvement of the locomotive engine, and it is necessary, as well as interesting, to glance at the state of railways, and the locomotive, when he entered upon the scene; and the opportunities which he had previously experienced to venture upon so formidable and important an undertaking.

"We have seen that he had acted as fireman to his father at Wylam, and, subsequently, at seventeen, as brakesman, at Callerton colliery, a short time after as engineman at Walbottle, that he then removed to Willington Quay, and afterwards to Killingworth. At Walbottle he would see a railway for the conveyance of the coals from those pits to the river Tyne, near Lemington, but this was a wooden railway. He would, likewise, see the wooden railway from the Wylam colliery to the river Tyne, which passed through Newburn, the cast iron tram rails only being down as a substitute for wooden rails in 1808. At Willington Quay, he had only, I believe, a wooden railway for the conveyance of ballast, but when he went to Killingworth he would then see a cast iron railway, on which the coal waggons were dragged by horses. These rails were the common cast iron round top rails, in three feet lengths, and only of sufficient strength to carry a chaldron waggon loaded with fifty-three cwts. of coal.

"His experience of railways had then only been of short duration, and the maximum performance of railway communication, at that time, was about three waggons of four tons each, or twelve ton gross, conveyed twenty miles a day with horses, at the rate of two and a half miles an hour. Attempts had been made to employ locomotive engines on railroads. Watt, Evans, Symington, Murdoch, had all considered, and made suggestions for the employment of steam engines to propel carriages, both upon railways and common roads.

"Trevethick, in 1802, patented an engine, and in 1804 it was tried on a railway in Wales, but abandoned. Mr. Blenkinsop, in 1811, took out a patent for a locomotive engine, working by a rack, or toothed rail, which was employed at the Middleton colliery, near Leeds, in 1812, and an engine of this description was also used on the Coxlodge colliery railway in 1813. Chapman also had an engine which worked by an endless chain, and which was placed on the Heaton colliery railway in 1813. Brunton had also an engine, which was tried on the Newbottle railway in 1813. Mr. Hedley, of Wylam, also constructed a locomotive engine, which commenced working on the Wylam railway in the early part of 1813. This railway was a cast iron tram road, and Mr. Hedley being doubtful if the adhesion of the wheels upon the railway was sufficient for the engine to propel itself, and also a load forward, had some experiments made for that purpose on the Wylam railway, with a carriage made expressly with that object, the result, as stated by Mr. Hedley's son, in a pamphlet, entitled 'Who Invented the Locomotive?' was, 'that the friction of the wheels of the experimental carriage alone upon the rails, when it approached to the weight of an engine carriage was sufficient to enable it to overcome the resistance of an attached train of carriages.'

"Such was, then, the state of railways, and the progress made towards the use of locomotive engines on the different railways, up to the time when Stephenson first turned his attention to the subject. Blenkinsop's with rack wheels; Chapman's with a chain; Brunton's with legs to propel them; and Hedley's, at Wylam, which propelled itself by the adhesion of the wheels upon the rails.

"Soon after Stephenson had become established as engineer to the partnership collieries, in 1813, his attention was drawn to the cost of conveying the Killingworth coals by horses, where one horse only took three chaldron waggons, or about eight tons of coals, at a time. He had inspected the locomotives at Heaton and Coxlodge, which had been abandoned, and that at Wylam, which was at work. The latter engine was working on a plate rail, and with this information of what had been done, he set to work to construct an engine. The first question was as to the adhesion of the wheels upon the round top rails, and several experiments were made by Stephenson and myself, on the adhesion of such rails. Having been satisfied on this point, Stephenson discarded any extraneous assistance to propel the engine forward, such as employed by Chapman, Brunton, or Blenkinsop, simply coupling all the engine wheels together, so as to have the adhesion of the whole weight of the engine.

"The first locomotive engine which propelled itself by the adhesion of its wheels on the round top rails was erected at Killingworth, and tried on that railway on the 27th of July, 1814. The steepest gradient on that line, with the load, was 1 in 450, which it ascended with eight loaded waggons, weighing altogether about thirty tons, at the rate of four miles an hour. At this time Robert Stephenson was about eleven years of age, and had just entered at Bruce's school, Newcastle.

"I have alluded to the successive improvements made by Stephenson in the locomotive engine. Cog wheels were, first of all, superseded by an endless chain, to secure adhesion of the four wheels. Next by a system of cranks with side rods. And up to the time of the Liverpool and Manchester experiments in 1829, this was the only description of engine used. The improvements in the construction of the locomotive engine by Stephenson, over those at that period in use, viz., that on the Wylam tram-road, and by Mr. Blenkinsop's, at Leeds, was in the application of two cylinders, instead of one in the former engine, and in the mode or modes of communicating the action of the pistons to the driving wheels of the engine, and the application of the power adhesion on the round top rails to propel the engine and load, without the intervention of racked rails or other contrivances to propel the engine forward.

"The first engine on the Killingworth railway had four three-feet driving wheels. Four-feet wheels were afterward used, by which an increased effect was produced by the diminished friction of the working parts of the engine, and by the increased speed which was attained. It had only one tube through the boiler, twenty inches in diameter and eight feet in length, by which the steam was generated. It was soon found that the great drawback to the power of the engine was the comparatively deficient quantity of steam generated in a given time.

"The weight of the rails of the Killingworth railway, which were cast iron, was from thirty-two pounds to forty pounds per yard; their strength, or rather weakness, therefore, precluded the adoption of heavy engines, or large boilers, and hence the limit, at that period, to the power of the locomotive engine. The blast in the chimney, which afterwards formed so important an element in the evaporation of steam, was then comparatively inoperative, from the imperfect mode in which it was applied, and from the slow rate of speed at which the engine moved.

"As the subsequent importance of the blast in the chimney has given rise to more than one claimant for the discovery of this contrivance, it is necessary that I should make a few observations on the part which Mr. Stephenson took in the matter. Mr. Hedley states in his work, 'It was at Wylam, in the small chimney, that the value of the blast was ascertained, and not elsewhere.' Mr. Timothy Hackworth likewise aspired to the efficient application of it, if not to the original application. Whether or not the importance, or efficient application, was first of all adopted at Killingworth, I know that the steam from the cylinder was passed into the chimney by a pipe in the first engine tried on the Killingworth line; and as the mouth of the pipe was turned upwards, it must of necessity have acted as a blast, as, from the noise made by the exit of the steam into the chimney through the pipe, the engines got the name of 'puffing billies.'

"Mr. Hedley passed the steam from the cylinder into a receiver, from which it passed into the chimney by a pipe for the purpose of preventing the noise of the injection of the steam into the chimney, and which, he says, prevented the noise of the steam. This was inconsistent with the action of a blast; but, he adds, 'many persons say that from the first it was apparent the chimney-draught was increased,' and 'I have also been told that the pipe got furred or partially choked; and when the obstruction was removed, it was found that steam could not be generated so rapidly, and that, to increase the supply, the drivers, by means of an iron ring, contracted the orifice of the pipe, and kept it secret for some time.'

"As Mr. Hackworth's application of the blast, was to the Stockton and Darlington engines, which were not used until some years subsequent to the time the Killingworth engine was tried, he could have no pretence to the original application of the blast; and as Mr. Hedley does inform us when the circumstances alluded to took place, we cannot determine whether it was previous to, or later than July, 1814, when it was first used by Mr. Stephenson.

"The description of this engine and the application of a double-tube engine on the heavier rails of the Stockton and Darlington railway, were the only descriptions of engines working by the adhesion of their wheels on the round top rails, until the year 1829, when the experiments at Liverpool took place, which led to the most important improvements of those engines.

"The maximum performance with six-wheel engines, on the Stockton and Darlington railway, as reported by Messrs. Walker and Rastrick, who were employed by the Liverpool and Manchester railway to inquire into the most efficient description of motive power then used on railways, with a view of advising what description of motive power should be used on that railway, was eighty-six and a half tons, including engine and tender, weighing eighteen tons, moved at the rate of five miles an hour; and with four-wheel engines, on the Killingworth railway, sixty-seven and a half tons, including engine and tender, of ten and a half tons weight, moved at the same rate of speed.

"Such then was the power of the locomotive engines in use in the early part of the year 1829, when the directors of the Liverpool and Manchester railway offered a premium of £500 for the most improved locomotive engine; and as the merit of the greatest portion of the improvements which carried away that premium was due to Mr. Robert Stephenson, it may be proper to trace his history up to that time.

" * * * He was first of all * * * put to the village school at Long Benton, to a Mr. Reuter * * * with whom he continued until the year 1814. He was then sent to Mr. Bruce's academy at Newcastle-upon-Tyne, and was well known on the road between his father's residence and Newcastle, a distance of upwards of four miles, by riding back and forth every day upon an excellent ass (noticed in Smiles' work). He remained at Bruce's school for about four years, or until 1818, when he was entered as an apprentice to me as a mining engineer, at Killingworth, living, of course, with his father all the time. He remained with me about three years, when his father sent him to Edinburgh to attend the college lectures, which he did for about six months. He then returned to Killingworth, where he remained until 1824, when he left for Columbia, having been engaged to inspect some mines in that country for a mining company, from whence he returned in 1827. He was thus at home at Killingworth, after leaving school, from 1818 to 1821, engaged in his apprenticeship as a mining engineer, or from the age of fifteen to eighteen years; and again from 1822 to 1824, or from nineteen to twenty-one years; and he returned permanently in 1827, when he was twenty-four years of age.

"As regards the improvement of the locomotive engine, therefore, it does not appear that he entered upon the exercise of those talents which became so conspicuous thereafter, until about the years 1823 and 1824, on his return from college. The engine manufactory had then been established in Forth Street, Newcastle-upon-Tyne, in which his father was a partner, and where he was employed, amongst other things, in making the drawings of the locomotive engines for the Stockton and Darlington railway. On his return from South America, we find him assisting his father in the construction of railways, as will be explained hereafter, and, no doubt, considering the subject of the locomotives to be employed on the Liverpool and Manchester railway, which was then in the course of construction by his father.

"After this brief history, I shall leave the case of the locomotive engines in the state in which they were in 1829, and shall now follow up the history of the improvement of railways from 1813, the date when his father was first employed as an engineer at Killingworth colliery, up to the same period, more especially as from that time, viz., 1829, we may date the joint effort of the father and son being applied to promote the improvements of both locomotive engines and railways."

(To be continued in Next Issue)

Fifty Years Ago

THE progress of experiments with the electric light seems to afford additional proof of the importance of the discovery and of its value for practical use. In Paris it has been subjected to careful trial at the Paris, Lyons & Mediterranean Railway station, where the whole of the building was illuminated like day. The light seems especially adapted to large railway buildings, such as the shop of the Lake Shore & Michigan Southern at Cleveland, which was recently lighted with two electric lamps, each equal to 2,000 candle lights.—*Railway Age*, February 21, 1878.

The Pullman Company has received a request from a man who was forced to take an upper in the car "Aloha," that the car be rechristened "Anuppah."—*Railway Age.*

Vagabondage In England

(Continued from Page 135)

was made for the homeless monks. As a class they were not very intelligent, and many of them were soon reduced to begging. Thus they swelled still further, after the dissolution of the monasteries, the ranks which they had helped to maintain before.

Immediately after the defeat of the Spanish Armada in 1588, the number of vagabonds was greatly increased by poor soldiers and sailors on their way home from the wars. Provost marshals were appointed with the special duty of apprehending and punishing them, and occasionally special tribunals were held to inquire into their complaints. The Council finally ordered that they should be given, along with their discharge at the port towns, an allowance of money for their expenses homeward and a license permitting them to travel unmolested so long as they followed a specified route and arrived within a definite limited time.

The problem of getting a living without work was simplified to the vagabond by the fact that there was everywhere a large amount of indiscriminate charity—at the monasteries before their dissolution, at weddings and other feasts, and at the houses of foolish, soft-hearted persons. This life was further made easy by the fact that the authorities granted a wide variety of what were considered deserving poor, licenses allowing them to wander and to ask alms on the streets and highways. The number of these licenses regularly issued was enormous. They were counterfeited by undeserving rogues on every hand. They were given character largely by the number and variety of legitimate licenses in use—licenses to beg for ransoms of Christians captured by the Turks; on account of losses by fire and at sea; to scholars at the universities; for indulgences and pardons; for the support of hospitals; for the relief of insane, sick and lame; to renew church furniture; to repair a bridge; for causes without end. These permits took on an air of respectability, and were looked on with something of the same attitude we now have to an insurance policy—a means of compensating one individual for extraordinary calamity by a small sacrifice from many.

The gypsies came to England as early as the beginning of the sixteenth century. Wandering vagabonds patterned their life in many ways upon the practices of the gypsies, disguising themselves as gypsies, wandering in company with them and adding to the general confusion.

Before 1530 there was almost no legislation upon beggars and vagabonds, but from that year until the end of the century the rogues and beggars received constant attention from Parliament. The legislation fell into three periods and from it three conclusions seem to be drawn: (1) that severe and cruel punishments did not suppress vagabondage but only made it more exciting; (2) that the one effective punishment for sturdy vagabonds and beggars was to set them to work; and (3) that for the relief of impotent poor it was far better to levy a regular tax than to depend on charity. These brief general statements sum up what was in reality a great legislative triumph. The hangings, the whippings, the confinement in the stocks were abandoned. The houses of correction and provision of wool and hemp did what the whips and stocks and even the gallows did not do. Being set to work was worse than death. The measures of restraint became regular instead of being violent and spasmodic. Whippings and worse punishment they had been able to evade or endure, but work was another matter. While, as to the impotent poor, the English lawmakers, in a period of seventy years, developed from the rudest of beginnings a code of laws which were the foundation of English poor relief for the next two hundred years.

The interesting and dangerous element had been not the impotent poor but the sturdy beggars. These were the fellows who had been strong and keen-witted enough to make vagabond life exciting and pleasant. Far from being either an impotent or a harmless class, these rogues represented much of the solid strength of mediaeval England. Many of them came from good stock, but in the new economic scheme they found no useful place. They had brains to plan villany and audacity to execute it. Their ranks contained political, religious, and social malcontents and agitators. There was a close-knit fellowship among them; they helped each other in their common pursuit of preying upon the public. They often traveled in companies or assembled at some alehouse for merry meetings. They spoke together in a cant language. There were orders or ranks depending partly on experience, partly on methods of stealing or begging, and partly, it seems, on physical strength. There were twenty-four of these orders ranging from "Rufflers,"

Benefits Paid Recently Total $65,951

IN recent months, or rather since the publication of a similar list in *The Bulletin* of February 15, last, death benefits of $65,951 have been paid to the beneficiaries of thirty-seven deceased employes under our plan of Group Insurance. Relatives of five pensioned employes received $9,800 of this sum by virtue of a resolution passed by the Board of Managers on June 21, 1922 providing for the continuance by the Company of existing insurance on the lives of employes pensioned subsequent to April 1, 1922. It will also be noted that $5,000 was paid in excess of the face value of three policies as the result of their holders having suffered accidental deaths. Prior to death one subscriber received total and permanent disability benefits, the balance subsequently becoming due on the policy having been paid to the beneficiary. Individual remittances follow:

NAME	RESIDENCE	OCCUPATION	DATE DIED	CLAIM
Burke, Harry J.	Colonie	Machinist	Feb. 7	$1,800
Carkhuff, Harry P.	Wilkes-Barre	Water Tender	Dec. 23	500
Carpenter, George (P)	Carbondale	Storeman	Feb. 10	1,400
Combes, Anson A.	Binghamton	Engineman	Feb. 17	2,800
Coomes, Charles (P)	Cohoes	Flagman	Jan. 25	1,000
Conroy, Thomas	Troy	Laborer (M. P.)	Dec. 7	500
Copeland, William	Carbondale	Yardmaster	Mar. 15	3,000
Cox, Fred W.	Colonie	A. B. I & Repr.	Feb. 5	2,000
Davagio, Pasquale	Oneonta	Trackman	Jan. 1	1,000
Davis, Joseph L.	Olyphant, Pa.	Gate Watchman	Dec. 18	1,000
Dominique, Paul	Troy	Moulder	Dec. 25	1,000
Dougherty, John J.	Wilkes-Barre	Conductor	Dec. 30	*4,400
Eisenman, Jacob	Colonie	Patternmaker	Mar. 20	1,600
Fisher, Bert F. (P)	Cooperstown	Engineman	Jan. 28	3,200
Forney, Francis J.	Rensselaer	Electrician (Sig.)	Jan. 5	2,400
Gagliarde, Charles	Binghamton	A. B. I. & Repr.	Jan. 6	1,600
German, John Sr.	Wilkes-Barre	A. B. I. & Repr.	Feb. 25	1,800
Graziano, James	Whitehall	Trackman	Feb. 11	*2,000
Gurney, William C.	Binghamton	Conductor	Jan. 13	2,200
Harkins, John	Dickson, Pa.	Crossing Watchman	Feb. 28	1,000
Jones, Arthur (P)	Schenectady	Fireman	Dec. 23	1,000
Kelley, J. LeRoy	Whitehall	Engineman	Mar. 1	**2,351
Lappeus, William H.	Colonie	Car Repairer Helper	Jan. 23	1,200
Mahar, James P.	Oneonta	Car Inspector	Dec. 24	1,800
Markoli, Nick	Unadilla	Flagman	Sept. 23	***2,400
Monahan, Patrick J.	Green Ridge, Pa.	Asst. Yardmaster	Feb. 5	2,400
Parker, William H.	Mechanicville	Asst. Signalman	Feb. 11	1,200
Patkul, Tony	Providence, R. I.	Trackman	June 9	1,000
Purcell, Richard D.	Albany	Trainman	Mar. 6	1,600
Samler, Harry F.	Oneonta	Foreman (Car)	Feb. 7	2,600
Scully, Daniel	Cohoes	Storeman	Jan. 16	1,000
Shipton, Larry	Scranton	Trackman	Mar. 5	500
Smith, Dennis J.	Delanson	Trainman	Dec. 8	500
Smith, Phillip T.	Whitehall	Ditcher Fireman	Feb. 28	*3,600
Tario, Peter	Green Island	Trainman	Dec. 27	2,200
Winters, Willard S. (P)	Plattsburg	Engineman	Mar. 9	3,200
Wyklient, John	Wilkes-Barre	Box Packer	Dec. 27	1,200
			Total	$65,951

(P) Pensioned employe.

* Sum represents double indemnity.

** Balance remaining on policy for $2,400 after insured had received Total and Permament Disability benefits of $49.50. Exact balance $2351.50.

*** Death occurred in 1926 and the subsequent delay in the payment of benefits was due to the inability to locate the deceased's relatives.

sturdy vagabonds who begged from the strong and robbed the weak, to "Kynchin Coes," male children used for begging, lookouts and such-like work. The palmiest days for these rogues were from 1547 to 1575.

The rogues were so hard to distinguish from the harmless vagabonds that all were legislated against in common under the one comprehensive term "vagabond." But while the legislation against begging had been a great triumph, on the other hand that against the rogues was an absolute failure. The problem was more complicated, of course. The rogues were far more clever than the wandering beggars, and it was obviously difficult to legislate against a tribe whose pride it was to have a new trick for every occasion. The rogues were far less numerous than the beggars, and their doings were more carefully hidden from the public. Without a detective force and a rogues gallery it was hard to catch them.

But the most important reason for the rogues immunity from legal interference was plain "graft." They had influence in high places. Gaming houses and bowling alleys, taverns, alehouses, et cetera, were licensed, loaded dice were approved and sealed, marked cards were sold and the profits shared with the favorites of the Crown. Hence it was that the rogues, shielded by royal protection on the one hand, and by the vagueness of the laws and stupidity or dishonesty of the officers on the other, went on practically unchecked.

No age in the history of England has offered its thinkers such difficult problems with such scant help toward their solution. We to this day enjoy the fruits of their success in dealing with the problem of the impotent poor. We to this day have in no way overcome their failure in dealing with the rogue. They failed through ignorance, not seeing the paralyzing effect of graft, the association of the rogues with the officers of the state, careless, selfish and corrupt in the discharge of their duties, sharers of the spoils. They made an honest effort and failed in ignorance. We do nothing and sin against the light.

An eminent English authority, Doctor Kerr, writing on education, says "the business of a school is not primarily to impart book-knowledge but to develop healthy personalities. The extra-curricula activities take on an increasing importance because the College now has to supply much of the culture which in happier times was picked up at home in ordinary social intercourse."

He's Always Been With Us

(*Continued from Page* 132)

ferred to a day shift as a machinist in which capacity he was employed when he retired.

On January 1, 1870, he was married to Margaret Nalley, of Carbondale, and to them two sons and four daughters were born. One son, Charles, suffered an accidental death at the "dry bridge," between Howe's Cave and Cobleskill, in 1890. Another son, WALTER, learned the machinist's trade at the Oneonta shops where he is still employed, but as a foreman. Three daughters married railroad men. Mrs. J. P. Cannon, of Albany, was formerly the wife of the late Thomas E. Riley, an engineman, and the others are the wives of T. P. DUGAN, general boiler foreman and locomotive inspector, and H. E. SEXTON, assistant yardmaster at Oneonta. Mrs. Morrison died on November 7, last.

He is commander of the E. D. Farmer Post No. 119, G. A. R., of Oneonta, which, at this late date, boasts of a membership of seventeen. He is also a member of St. Mary's Roman Catholic church and the Knights of Columbus, of Oneonta; the Brotherhood of Locomotive Engineers, Division No. 58, of Oneonta, of which he is a charter member; and The Delaware and Hudson Veterans' Association.

Index for The Bulletin

An index for Volume 7 (1927) of *The Bulletin* is now available. Requests should be made to *The Bulletin*, Room 408, The Delaware and Hudson Building, Albany, N. Y.

Rastus: "I tells you, Sambo, I done found out de difference between men and de women at las'."
Sambo: "What—what is it?"
Rastus: "Wall, a man'll gib two dollars for a one dollar thing dat he wants, an' a woman'll gib one dollar fer a two dollar thing she don't want!"
—*Clipped.*

INSURANCE CLAIMS PAID

MARCH, 1928

Death benefits - - - - -	$21,151
Health benefits - - - - -	11,433
Accident benefits - - - - -	583
Accidental Death and Dismemberment benefits - - - -	3,300
Total and Permanent Disability benefits	519
Total benefits - - -	$36,986

Clicks from the Rails

Road of Many Curves

In twelve miles of track on the Umtah Railroad, which connects Mack, Cal., and Watson, Utah, seventy miles distant, there are 233 curves some attaining a curvature of six degrees. Extremely steep grades are also encountered in the Bookcliff mountains, where the road climbs from an elevation of 4,541 to 8,437 feet above sea level, in a distance of thirty-five miles. Geared locomotives are used on account of these grades, but are to be replaced by specially constructed rod locomotives. On account of the road's natural handicaps it has been named by the Interstate Commerce Commission as the most difficult railroad in the United States to operate.

Gilsonite, a mineral, the world's only large supply of which comes from the eastern region of Utah, is the principal product carried. During the past year 35,000 tons were transported.

* * *

King's Train a Marvel

King George of England's private train, a marvel of coach work and interior decorating, affords all the luxuries of his most exquisite summer palace. He enters the train through polished double doors of teak, which open into a large vestibule. His smoking room, adjoining the vestibule is finished in choicest mahogany, with a morocco leather covered arm chair in each corner. The day compartment is furnished in silk-trimmed furniture and imitation Jacobean tapestry, chosen by the queen. Leading from the day compartment is the king's bedroom, containing a silver-plated bed and satinwood dressing table. Further along is the bathroom.

* * *

Owl Stops Express Train

Passengers on the Vologda-Leningrad express were badly shaken up recently when the train, while running at a speed of fifty miles per hour, stopped abruptly. Investigation developed that an owl had alighted on the locomotive and had clutched an air valve in an effort to hold on, thereby applying the brakes in emergency. The bird was captured and the train proceeded.

B. & O. Has Clock of Mystery

In the office of the general superintendent of the Baltimore & Ohio at Pittsburg, according to the *Railway Age,* is a clock of mystery. It is a huge affair and the cabinet is encased in solid walnut. Watchmakers who have examined it state that it dates back to the Revolutionary War period and is at least 150 years old. Despite its advanced age, however, it keeps remarkably good time. It has been in the office since 1901, when the Baltimore & Ohio took over the Pittsburg & Western, but its history prior to that time is unknown.

* * *

Oxen Used for Motive Power

Oxen are the motive power used for switching cars on a railroad siding of a cotton-seed mill at Navasota, Texas. Locomotives are available for switching purposes only once or twice daily and loading was therefore frequently delayed until their arrival when cars could be respotted at loading platforms. Texan longhorn steers are always at hand and have proven an efficient substitute for switch engines. Six oxen can pull 200,000 pounds or more. One prize yoke of steers, weighing 2,200 pounds each, can move a box car alone.

* * *

Consider 100-Foot Rails

German railroad officials may substitute thirty-meter (98.425 feet) rails for the fifteen-meter lengths now being used on their trunk lines. Shocks caused by rail joints would thus be reduced by one-half, thereby adding to travel comfort. Travel on German railroads is very cheap, approximating only one and one-tenth cents per mile during 1927, when two billion passengers were carried. Freight and passenger trains covered nearly four billion miles during the year.

* * *

One Family Comprises Crew

John Mead, a conductor, and his five sons, all in the employ of the Great Western Railway in Wales, comprise the crew of one of its crack trains. Two of the boys are engineman and fireman, respectively, while the other three complete the crew.

Automatic Train Control

Automatic train control has been installed on 546 track-miles of the Rock Island and is reputed to be the greatest track-mileage in the world so protected. This distance includes two operating divisions. One hundred and forty-six locomotives have been equipped with train control attachments. The system is of the contact type and is operated in conjunction with the three-position block signals. When the block signal displays a clear indication the operation of the train is left to the engineer just as if there were no train control system. If the signal indicates caution, passenger trains are slowed down to a speed of thirty miles an hour, and freight trains to twenty-five miles per hour. When the semaphore indicates stop the train is automatically brought to a stop.

* * *

N. Y. C. Erects New Enginehouse

Constantly increasing traffic has caused the New York Central to erect a new enginehouse at Harmon, N. Y., at a cost of $2,000,000. Thirty-one locomotives can be housed in the new building, which has twenty-five stalls with 120-foot track space, and six drop-pit stalls 150 feet in length. Electric jacks make it possible to replace driving wheels which work hitherto has been done at the West Albany shops. Other improvements include an electrically driven turntable, two concrete ash pits twenty feet in depth, and a modern flood lighting system.

* * *

New Process to Destroy Weeds

Weeds along the right of way may now be quickly destroyed by means of a device which burns them off at the roots. It consists of a car on which are two engines and two large fuel tanks. One of the engines is used to propel the car; the other creates a blast with a range sixteen feet in width which is used in burning the weeds. It will effectively destroy weeds while traveling at a speed of five miles per hour but can attain twenty miles per hour when not in operation, and therefore can be moved rapidly to clear trains or to move to another location.

Happiness Is A Gift

HAPPINESS is never an earning, it is a by-product or rather, it is a gift. It is poured into hearts prepared. I think that most of us entertain a contemptible notion of happiness. We think of it as one might of a short potato-crop — not enough to go around. Indeed, that is precisely the reason sometimes given for the unhappiness of so many people—that there is not enough happiness to supply the needs of all. Whereas, the more happiness there is the more there is likely to be. Happiness is not a fixed quantity, like the world's gold supply. Really, happiness is an infection; the more who have it the more are likely to catch it. Did you ever see one child happy with the crudest toy, and another child unhappy with arms full of toys? There are not enough toys to beget happiness. Happiness is a distillation, a reaction, a gift of hearts prepared for it.

—*Selected.*